

(Model.)

T. G. F. DOLBY.
Can.

No. 238,218.

Patented March 1, 1881.

Fig. 2.

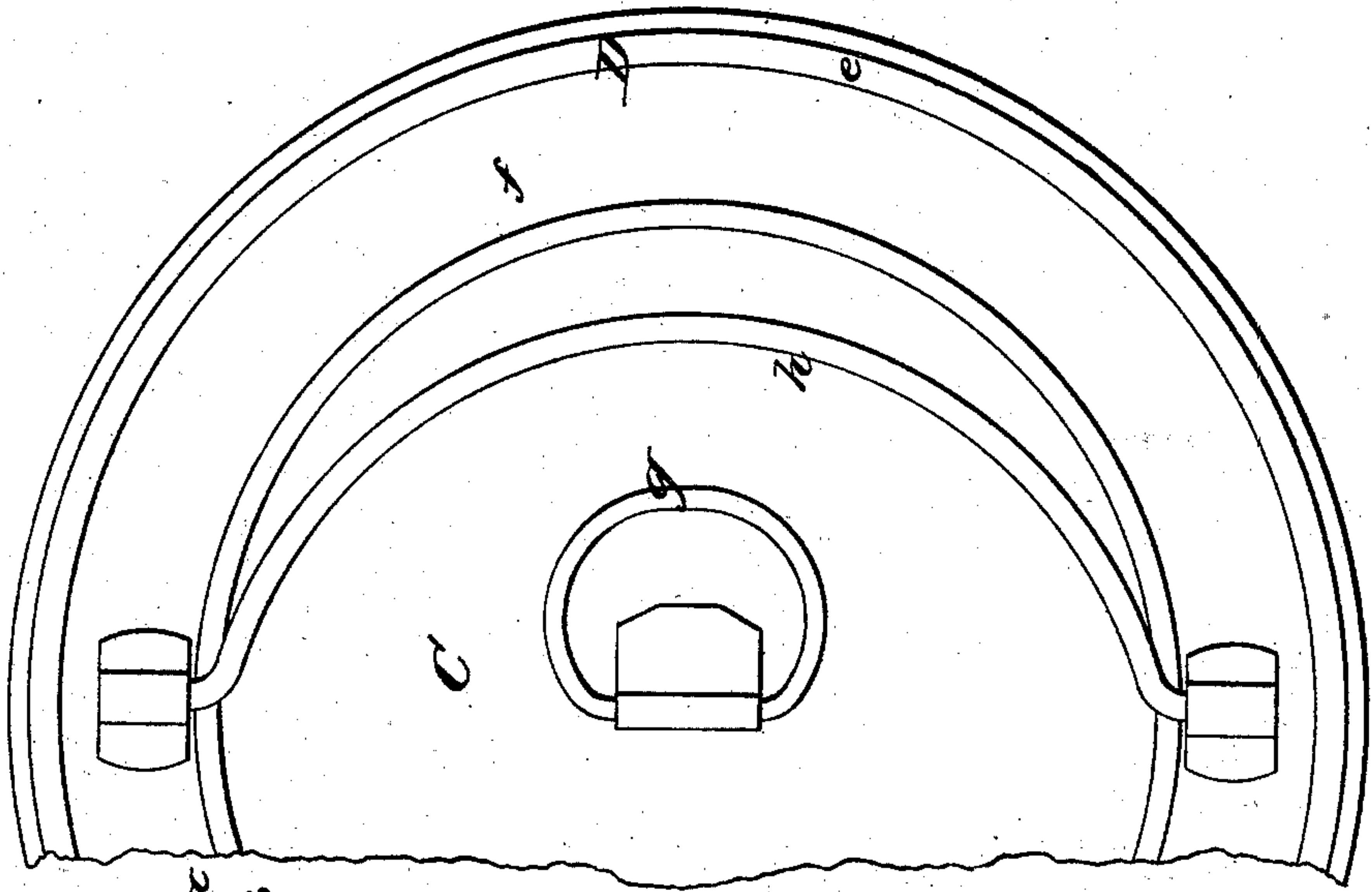


Fig. 3.

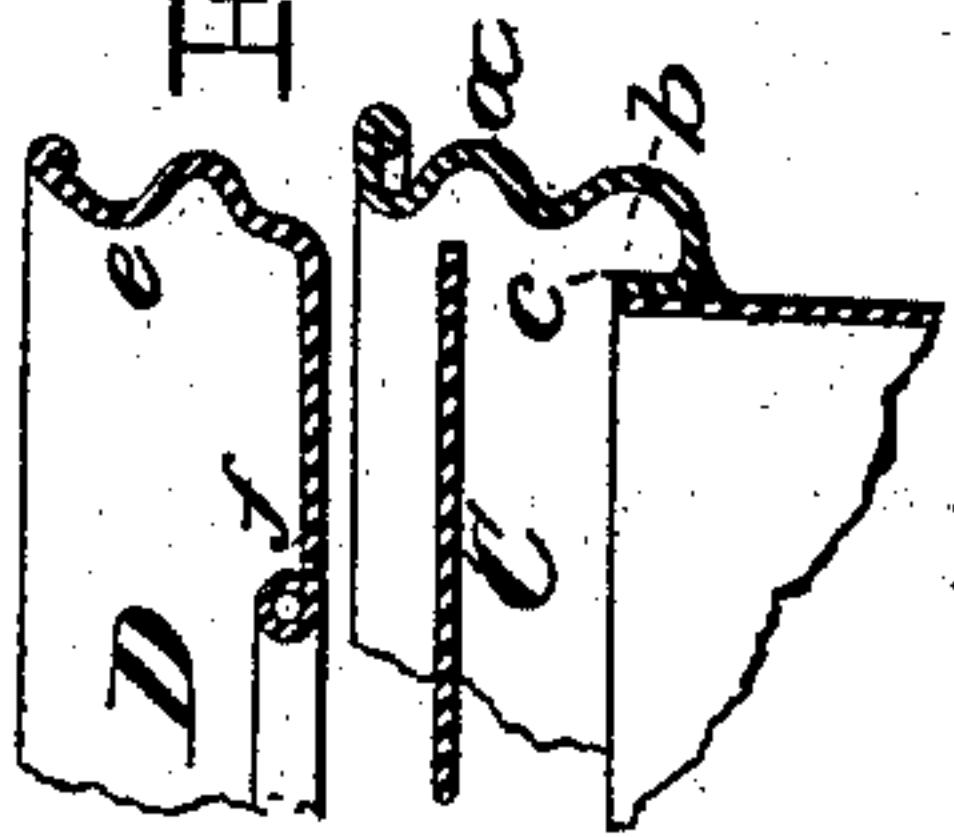
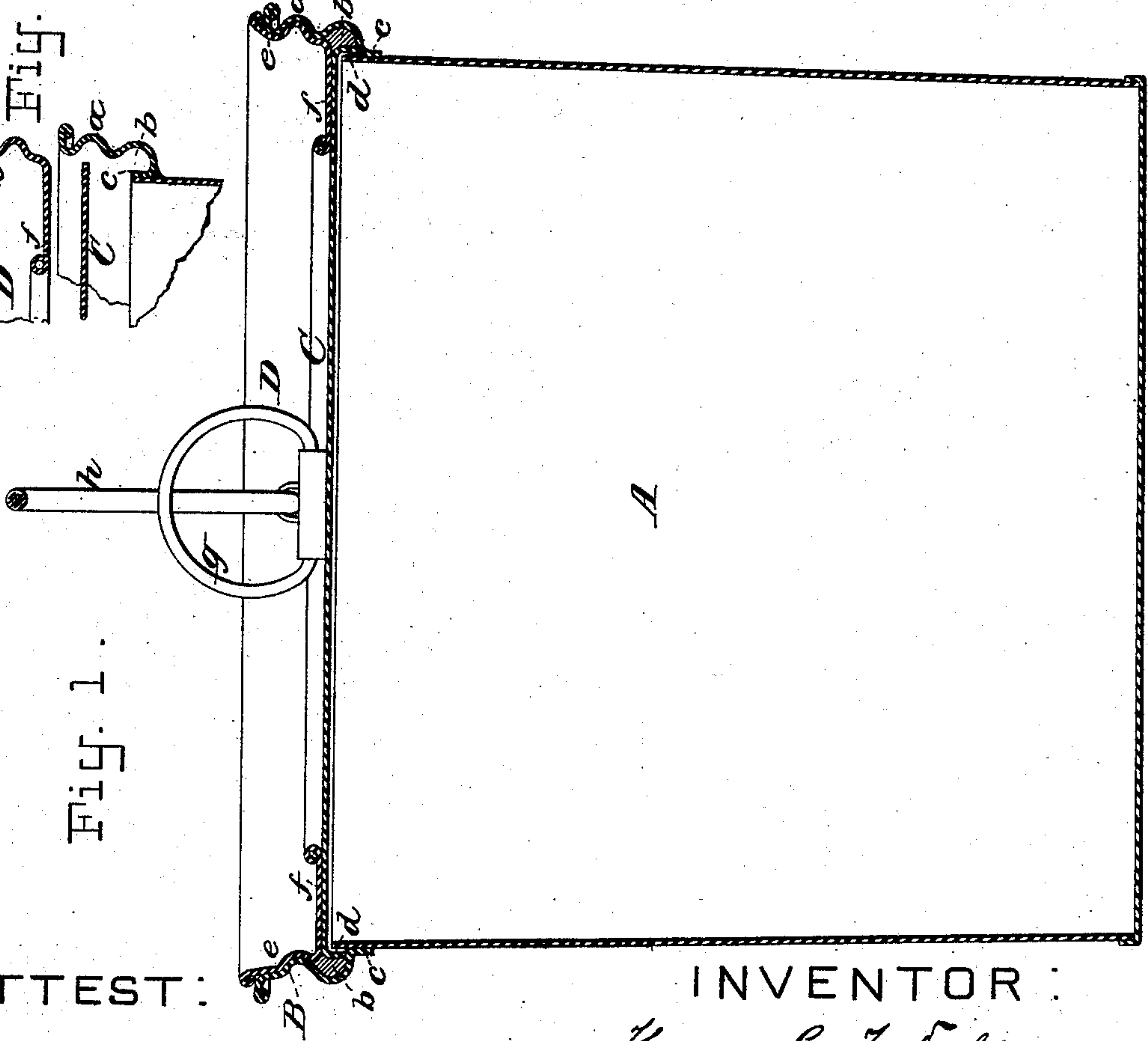


Fig. 1.



ATTEST:

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UNITED STATES PATENT OFFICE.

THOMAS G. F. DOLBY, OF LONDON, ENGLAND.

CAN.

SPECIFICATION forming part of Letters Patent No. 238,218, dated March 1, 1881.

Application filed September 22, 1880. (Model.)

To all whom it may concern:

Be it known that I, THOMAS G. F. DOLBY, a subject of the Queen of Great Britain, residing in London, England, have invented certain new and useful Improvements in Cans, of which the following is a specification.

This invention relates to cans of sheet metal adapted for a variety of uses, but especially for preserving food; and it consists in the construction of the can-top and means for securing the cover thereon, as will be more fully hereinafter set forth.

In the drawings which serve to illustrate my invention, Figure 1 is a vertical mid-section of my can, and Fig. 2 is a plan of the same partially broken away. Fig. 3 is a fragmentary section, illustrating a slightly modified construction, and showing the parts slightly separated.

A is the body of the can, which may be tapering, as shown, or cylindrical, as desired.

B is a rim which has a screw formed in it, as shown at *a* in Figs. 1 and 3. At its lower edge this rim is curved inward to form, first, an annular channel, *b*, and, secondly, a rim or ledge, *c*, which fits the top or margin of the body A, and is soldered or otherwise secured thereto. This rim C may turn up or down. These parts A and B form the can proper.

C is the lid or cover. This cover is a disk provided, by preference, with a flange or ledge, *d*, turned down all around its margin, which flange takes over the top of the can-body when the lid or cover is put in place. The ledge or flange *d* drops into the annular channel *b*, and may extend to and rest upon the bottom of the same, so as to raise the cover slightly above the top of the can-body, as in Fig. 1. This, however, is a matter of little importance. The cover may rest upon the can, and the flange *d* depend into, but not to the bottom of, the channel *b*. When the cover rests on the top of the can the flange *d* may be dispensed with, as in Fig. 3.

D is a ring composed of an upright portion, *e*, provided with a screw to fit the screw formed in the rim B, and a horizontal part, *f*, which rests upon the cover C when the ring is screwed down.

The method of closing the can is as follows:

After the can has been snugly filled up to the top of the can-body the cover C is placed in position and pressed down to its seat, and the channel *b* carefully cleaned out, if required. This channel is then filled with some putty-like wax which will not harden, but which will hermetically close the joint between the cover and the can. The ring D is now screwed firmly down upon the cover, whereby it is held tightly in place and protected against disengagement from accidental causes. When the can is to be opened the ring D is unscrewed, and the cover may then be lifted out, as the wax will offer very little, if any, obstruction. As a wax for this purpose I prefer to employ a compound composed of olive-oil one pint, and beeswax one pound, well mixed and kneaded together. This forms a sticky tough wax having about the consistency of glazier's putty at ordinary temperatures, and it will neither harden nor shrink. The wax is put in cold, and the ordinary variations in temperature have no perceptible effect upon it; consequently it provides at all times a secure hermetic joint, but one which may be unsealed readily without the application of artificial heat. Some other non-drying oil might be substituted for that named, but I prefer olive-oil.

In some cases the butter or other substance may be heaped a little, and be compressed in pressing down the cover.

The cover is provided with a ring, *g*, whereby it may be readily lifted off, and the ring B is provided with a bail, *h*, hinged to it, as shown, which serves as a handle whereby the can and its contents may be carried, and also as a means whereby the ring may be screwed down upon the cover and also unscrewed. The bail is arranged to turn down into the recessed top of the can, so as to be out of the way when the cans are packed.

My can is especially adapted to packing butter, lard, paint, and similar substances, and it is not injured by being opened, so that it may be used over and over again. No rubber is employed for sealing the cover, as it is inevitably destroyed by contact with oily substances, and is, moreover, apt to impart a disagreeable odor. I also avoid sealing with wax, which chills and hardens, and which requires

melting before it can be applied, partly because all such waxes and cements are injured by heating, and partly because they shrink in cooling and draw away from the smooth metal; or, if the surface is rough and they do not draw off, they are liable to crack in cooling. Being also brittle, they are very liable to crack in handling the cans. Any of these mishaps will invariably destroy the hermetic character of the joint.

I employ a putty-like wax, which will neither harden nor shrink, and which adheres firmly to the metal of the can and cover.

The screw-ring does not aid materially in forming the hermetic joint—that is formed by the wax alone—but it serves to hold the cover firmly in place, and to prevent the joint from being disturbed by the handling of the cans.

Another important feature of my can is, that the screw whereby the cover is held down is arranged entirely beyond or outside of the wall of the can, and the opening in the can is the full size of the can-body. With this construction the contents of the can-body may be dumped or turned out without any interference with the means for holding down the cover.

I am aware that it is common to employ screw-caps on cans and jars to hold down the covers, and that covers resting on rubber packing-rings have been held down by means of independent screw-threaded rings. I am aware, also, that it is not new to employ cans having wax-channels, with means for holding down the covers on the cans until the wax or cement hardens, or as long as desired. I am also aware that a cement or wax composed of paraffine and rosin has been proposed for sealing on the

covers to cans. None of these, however, contemplate or accomplish what I seek or claim, and what I do claim is distinctively set forth below.

Having thus described my invention, I claim—

1. The combination of the can-body, having an aperture equal in diameter to the internal diameter of the body, and provided with a screw-threaded flange, arranged wholly beyond the wall of the can, and having formed within it a wax-channel, with a screw-threaded ring to screw onto the said flange and the can-cover, all constructed and arranged substantially as set forth.

2. The combination of the can-body, a rim, B, screw-threaded, and provided with a wax-channel, *b*, and secured to the outer face of the can-body, a cover, C, provided with a flange, *d*, and the screw-threaded ring D, all arranged to operate substantially as set forth.

3. The can-body, provided with a screw-threaded flange, which rises above its top and forms a channel for the wax, in combination with the cover provided with a ring, *g*, whereby it may be lifted off, and with the screw-ring provided with a bail, *h*, which is arranged to turn down into the recess formed by the raised flange on the can-body, substantially as set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

THOMAS G. F. DOLBY.

Witnesses:

OLE. H. HOLBERG,
HENRY CONNETT.